

UN Common Services
**UN City Changing Rooms
Refurbishment**
Architectural Specifications

CHA-ARUP-ZZ-XX-SP-A-0001

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This report takes into account the particular instructions and requirements of our Employer.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Appendices

Appendix A

Painting

1 Introduction

This specification document shall be read in conjunction with the other specifications and the rest of the contract documents.

Unless stated otherwise, the Contractor shall prepare the construction and carry out the construction, testing, commissioning and handover as required and described by each provision of this specification and its appendices, whether the provision is written as an obligation of the Contractor or is stated in the imperative form.

1.1 The Project

The project consists in the refurbishment and upgrade of the Changing rooms and adjacent corridor in the basement gym facilities at United Nations (UN) City in Copenhagen, Denmark.

This Project includes:

- Demolition works
- Refurbishment of the changing rooms area including access corridor, showers and toilets. This covers an area of approx. 90m² and is located in the basement.

1.2 Codes and standards

Unless expressly stated otherwise, each reference to a code or standard in this document shall mean the latest version of that code or standard.

Compliance with the codes and standards noted in this document is mandatory. This includes any other codes and standards applicable to the project and the respective scope of work even if not listed in the contract documentation, whether noted in general or expressly referenced.

2 Scope

The architectural works shall comprise, but not be limited to the following:

- Decommissioning works: Removal, storage, re-usage of existing elements
- Floorings
- Partition walls
- Sanitary
- Ceilings
- Painting
- Doors and Ironmongery
- General Furnishing Equipment.

3 General Requirements

3.1 Codes and Standards

The Contractor shall be responsible for complying all relevant codes and standards, not only limited to the codes and standards listed in this appendix.

3.1.1 General Codes & Standards:

- ISO 9001:2015 Quality Management
- DS EN ISO 14001:2015 Environmental Management Systems - Requirements with Guidance for Use
- BR 18 The Danish Building Regulations 2018 – Bygningsreglementet 2018
- SBI-anvisning 252 - Vådram
- SBI INSTRUCTION 272 (Danish Building Research Institute Instructions): Instructions for Building Regulations 2018
- SBI INSTRUCTION 228 (Danish Building Research Institute Instructions): Asbestos in Buildings
- SBI INSTRUCTION 229 (Danish Building Research Institute Instructions): Building Materials with Asbestos
- SBI INSTRUCTION (Danish Building Research Institute Instructions): Labour requirements. Instructions for labour inspection requirements.
- Danish working environment authority 3.a. At-Guidance (best practice) Workplace layout and fixtures - A.1.15; Edition 2008
- BS 5606:1990 Guide to accuracy in building (or relevant Danish code & regulations)
- BS 8000-0:2014 Workmanship on construction sites (or relevant Danish code & regulations)
- DS EN 13238:2010 Reaction to fire tests for building products. Conditioning procedures and general rules for selection of substrates
- DS EN ISO 717-1:2013 Acoustics. Rating of sound insulation in buildings and of building elements
- DS/EN ISO 11654:1997 Acoustics - Sound absorbers for use in buildings – Rating of sound absorption
- DS EN ISO 140-3:2010 Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation
- DS/ISO 21542:2012 Building construction - Accessibility and usability of the built environment
- DS/ISO 17049:2013 Accessible design - Application of braille on signage, equipment and appliances.

3.2 Requirements for Elements

3.2.1 General Responsibilities

The Contractor is fully responsible for recommending methods and installation. The design, fabrication, installation and performance requirements herein specified are intended to establish minimum performance standards and general principles.

Upon appointment, the Contractor shall provide and be responsible for all aspects of the planning and production of the construction solution(s) which shall be at his own expense.

- The Contractor shall be responsible for planning and details of their own designs.
- The Contractor shall be responsible for the selection of materials.
- If any performance requirement is specified elsewhere in this Specification, the Contractor shall be responsible to meet these requirements.

The Contractor is also responsible for testing and commissioning all utility networks and should allow for all necessary temporary works and fittings, third party attendances and associated costs as required.

3.2.2 Equivalent Products

Wherever product references are specified by proprietary name, alternative products may be permitted subject to the following:

- Submit, a comprehensive list of all proposed alternative products identifying in each case:
 - The relevant specification clause number.
 - The product named in the relevant specification clause.
 - The proprietary name of the proposed alternative product.
 - The justification for the proposed substitution including any cost variations.
 - Samples upon request
- For every proposed alternative product submit for verification documentary evidence that the alternative product is equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance.
- Any proposal for use of an alternative product shall also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole.

- Provide revised drawings, specification and manufacturer's guarantees as required by the Employer. Before ordering alternative products, the Contactor shall obtain written confirmation from the Employer.

3.3 Performance Requirements

3.3.1 Materials and Work Generally

3.3.1.1 Good Practice

All materials, products and workmanship, which are not fully detailed or specified, shall be of a standard appropriate to the works and suitable for the functions stated in or reasonably to be inferred from the project documents, and in accordance with good building practice.

3.3.1.2 Excluded Materials

The following materials shall not be used in the works, or any component or part thereof:

- Materials being deleterious in themselves.
- Materials becoming deleterious when used in a particular situation or in combination with other materials.
- Materials becoming deleterious without a level of maintenance which is higher than that which would normally be expected in a building of comparable type.
- Asbestos or asbestos-containing products.
- Aluminum Composite Panels with polyethylene insulation.
- Materials being damaged by, or causing damage to, the structure in which they are incorporated or to which they are affixed.

For the purpose of this clause the word "deleterious" shall be deemed to include the use of materials or combinations of materials that would or might be hazardous to health or would or might have the effect of reducing the normal life expectancy:

- of the materials themselves.
- of any materials to which they are affixed.
- of the structure in which they are incorporated or to which they are affixed.

to a period less than that which would normally be expected.

3.3.1.3 General Quality of Products

The Contractor shall, before proceeding, obtain approval for any kind of material to be used. The materials to be used shall comply with samples, selected and approved by the Employer.

Products to be new unless otherwise specified.

For products specified to a Danish or European Standard obtain certificates of compliance from manufacturers when requested by Employer.

Where a choice of manufacturer or source of supply is allowed for any product, the whole quantity required to complete the work shall be of the same type, manufacture and/or source unless otherwise approved. The Contractor shall produce written evidence of sources of supply when requested by The Employer.

The Contractor shall ensure that the whole quantity of each product required to complete the work is of consistent kind, size, quality and overall appearance.

Where consistency of appearance is desirable, the Contractor shall ensure consistency of supply from the same source. The Contractor shall not use different color batches where they can be seen together.

If products are prone to deterioration or have a limited shelf life, the Contractor shall order in suitable quantities and use in appropriate sequence. The Contractor shall not use any product, if there are any signs of deterioration, settling or other unsatisfactory condition.

3.3.1.4 Proprietary Products

The Contractor shall handle, store, prepare and use or fix each product in accordance with the manufacturer's current printed or written recommendations/instructions. The Contractor shall inform the Employer if these conflict with any other specified requirement. The Contractor shall submit copies to the Employer when requested.

Ancillary products and accessories shall be of a type recommended by the main product manufacturer, unless otherwise specified.

The Contractor shall obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, the Contractor shall inform The Employer and not place for or use the affected products without further instructions.

3.3.1.5 Checking Compliance of Products

The Contractor shall check:

- All delivery tickets, labels, identification marks and, the products themselves to ensure that all products comply with the project documents. Where different types of any product are specified, the Contractor shall check to ensure that the correct type is being used in each location. In particular, the Contractor shall check that:
- The sources, types, qualities, finishes and colors are correct, and match any approved samples.
- All accessories and fixings which should be supplied with the goods have been supplied.

- Sizes and dimensions are correct. Where tolerances of components are critical, measure a sufficient quantity to ensure compliance.
- The delivered quantities are correct, to ensure that shortages do not cause delays in the work.
- The products are clean, undamaged and otherwise in good condition.
- Products which have a limited shelf life are not out of date.

3.3.1.6 Protection of Products

The Contractor shall prevent over-stressing, distortion and any other type of physical damage.

The Contractor shall keep clean and free from contamination. Prevent staining, chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work.

The Contractor shall keep dry and in a suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects. Where appropriate, the Contractor shall store off the ground and allow free air movement around and between stored products.

The Contractor shall prevent excessively high or low temperatures and rapid changes of temperature in the products.

The Contractor shall protect adequately from rain, damp, frost, sun and other elements as appropriate. The Contractor shall ensure that products are at a suitable temperature and moisture content at time of use.

The Contractor shall ensure that sheds and covers are of ample size, in good weatherproof condition and well secured.

The Contractor shall keep different types and grades of products separately and adequately identified.

So far as possible, the Contractor shall keep products in their original wrappings, packings or containers until immediately before they are used.

Wherever possible the Contractor shall retain protective wrappings after fixing and until shortly before Completion.

The Contractor shall ensure that protective measures are fully compatible with and not prejudicial to the products/materials.

3.3.1.7 Suitability of Related Work and Conditions

Before starting work, the Contractor shall check and confirm to the Employer that:

- Previous, related work is appropriately complete, in accordance with the works documents, to a suitable standard and in a suitable condition to receive the new work.

- All necessary preparatory work has been carried out.
- The environmental conditions are suitable.

3.3.1.8 General Quality of Workmanship

The Contractor shall ensure the highest level of good workmanship consistent with BS 8000 Standard for Workmanship on Building Sites and the manufacturer's requirements.

The Contractor shall provide all materials and workmanship necessary for the construction to meet the requirements of the Contract documents

All operatives shall be appropriately skilled and experienced for the type and quality of work.

The Contractor shall take all necessary precautions to prevent damage to the work from frost, rain and other hazards.

The Contractor shall inspect all components and products carefully upon receipt and before fixing or using and reject any which are defective.

The Contractor shall fix or lay all works securely, accurately and in alignment.

Where not specified otherwise, the Contractor shall select fixing and jointing methods and types, sizes and spacings of fastenings to comply with relevant Danish and European Standards.

The Contractor shall provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion. The Contractor shall not overtighten fixings.

The Contractor shall adjust location and fixing of components and products so that joints which are to be finished with mortar or sealant or otherwise left open to view are even and regular.

The Contractor shall ensure that all moving parts operate properly and freely. The Contractor shall not cut, grind or plane pre-finished components and products to remedy binding or poor fit without approval.

3.3.2 Samples/Approvals

3.3.2.1 Approval of Products

Where approval of a product is specified the requirement for approval relates to a sample of the product and not to the product as used in the works. The Contractor shall submit a sample and other evidence of suitability. The Contractor shall not confirm orders or use the product until approval of the sample has been obtained. The Contractor shall retain approved sample in good, clean condition on site. The Contractor shall ensure that the product used in the Works matches the approved sample.

3.3.2.2 Samples of Finished Work

Where a sample of finished work is specified for approval, the requirement for approval relates to the sample itself (if approval of the finished work as a whole is required this is required separately). The Contractor shall obtain approval of the stated characteristic(s) of the sample before proceeding with the works. The Contractor shall retain approved sample in good, clean condition on site. The Contractor shall ensure that the relevant characteristic(s) of the works match the approved characteristic(s) of the sample. The Contractor shall remove samples which are not part of the finished works when no longer required.

3.3.2.3 Approvals

Where and to the extent that products or work are specified to be approved or the Employer instructs or requires that they are to be approved, the same shall be supplied and executed to comply with all other requirements and in respect of the stated or implied characteristics either;

- To the express approval of the Employer or,
- To match a sample expressly approved by the Employer as a standard for the purpose.

3.3.3 Accuracy

3.3.3.1 Accuracy of Instruments

- The accuracy of dimensions scaled from the drawings is not guaranteed.
- The Contractor shall define all necessary any dimensions required.
- The Contractor shall only use instruments and methods described in BS 5606,
- Linear dimensions: +/-3mm up to and including 10m, +/-6mm over 10m and up to and including 30m.
- Angular dimensions: +/-5mm in 50m.
- Verticality: +/-5mm in 30m.
- Levels: +/-3mm per single sight of up to 60m.

3.3.3.2 Setting Out

The Contractor shall check the setting out of preparatory work by others against the dimensions shown on the drawings and record the results on a copy of the drawings. The Contractor shall notify the Employer in writing of any discrepancies and obtain instructions before proceeding.

3.3.3.3 Accuracy of Construction in General

The Contract Works shall be constructed to the following degrees of accuracy, in addition to any specific or particular requirements specified elsewhere in the contract documents:

Dimensional accuracy: The maximum permitted deviations, in the completed work, of dimensions and levels shown on, or calculable from, the drawings are:

- Up to 600mm: +/- 1mm.
- Over 600mm and up to 3m: +/- 3mm.
- Over 3m and up to 6m: +/- 5mm.
- 6m and above: +/- 8mm.

Variables: The permitted deviations referred to above relate to, but are not limited to, the following variables:

In the horizontal plane:

- The Contractor shall position in plan of any point or specified fair face in relation to the nearest setting-out point on the same floor level.
- The Contractor shall provide all dimensions on plan.

In the vertical plane:

- The Contractor shall provide all levels with reference to the nearest setting out point on the same floor level.
- The Contractor shall provide all dimensions in elevation and/or section.
- The Contractor shall provide all verticality (plumb) at any point. For verticality, the permitted deviation is measured at right angles to the vertical dimension.

Where a position, in either plane, may be located by more than one variable, the smallest permitted deviation shall apply.

3.3.3.4 Appearance and fit

The Contractor shall arrange the setting out, erection, juxtaposition of components and application of finishes (working within the practical limits of the design and the specification) to ensure that there is satisfactory fit at junctions, that there are no practically or visually unacceptable changes in plane, line or level and that the finished work has a true and regular appearance.

Wherever satisfactory accuracy, fit and/or appearance of the work are likely to be critical or difficult to achieve, the Contractor shall obtain approval of proposals or of the appearance of the relevant aspects of the partially finished work as early as possible.

Without prejudice to the above and unless specified otherwise, tolerances shall not be greater than those given in BS 5606, Tables 1 and 2.

3.3.4 Work at Completion

3.3.4.1 Completion of The Work Generally

The Contractor shall make good all damage consequent upon the work.

The Contractor shall remove all temporary markings, coverings and protective wrappings unless otherwise instructed.

The Contractor shall clean the works thoroughly and remove all rubbish and surplus materials consequent upon the execution of the work.

Cleaning materials and methods to be as recommended by manufacturers of products being cleaned, and to be such that there is no damage or disfigurement to other materials or construction.

The Contractor shall touch up minor faults in newly painted/repainted work, carefully matching colour, and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.

The Contractor shall adjust, ease and lubricate moving parts of new work as necessary to ensure easy and efficient operation.

4 Building Elements Specifications

4.1 Flooring

4.1.1 Cement Based Levelling Screed

Reference drawings and Material Codes

Sub- layer for FF-02 on PAF-ARUP-ZZ-XX-DR-A-3001, 3002 SECTIONS

4.1.1.1 General specifications

- Base: Existing structure without tiles/vinyl
- Screed type: Fully unbonded
- Cement: Portland to DS EN 197-1, class 42.5 and Portland blast furnace to DS EN197-1, class 42.5
- Sand: According to DS EN 12620+A1
- Grading limit: DS EN 13318.
- Coarse aggregate: 10 mm single sized, according to DS EN 12620+A1
- Proportions (cement: total aggregate): 1:4 – 5
- Cement to coarse aggregate: 1:4-5
- Cement: sand: coarse aggregate: 1:3,5:1
- Admixture: Water reducing, according to DS EN 934-2
- Finish: Rotary Troweled smooth surfaces as clause for thin sheet materials.
- Flatness/Surface regularity: Sudden irregularities are not permitted.
- Maximum permissible deviation when measured: 5mm under a 2m straight edge and 3mm under a 1m straight edge, where floor finishes include a bedding or 5mm under a 3m straight edge and 2mm under a 1m straight edge where floor finishes are laid directly onto the screed.
- In situ crushing resistance: According to DS EN 13318.
- General: Floors shall be suitable for specified levels and flatness/regularity of finished surfaces.
- Consider permissible minimum and maximum thicknesses of screeds.
- Sound and free from significant cracks and gaps.
- Cleanliness: Remove plaster, debris and dirt.
- Moisture content: New concrete slabs to receive fully or partially bonded construction must be dried out by exposure to the air for not less than six weeks.
- When needed, bush hammering process shall be applied to roughen the reinforced concrete slab, to remove the cement slurry.

- Preformed access ducts: Before laying screed, fix securely to base and level accurately in relation to finished floor surface.

4.1.1.2 Proprietary

- Materials, mixing ratios, method of mixing, minimum/maximum thicknesses
Laying
- Unbonded construction
 - Separation: Lay screed over sheet dpm or a separating layer.
 - Separating layer: Lay on clean substrate. Turn up for full depth of screed at abutments with walls, columns, etc. Lap 100 mm at joints.
- Floating construction
 - Haunching: Before laying insulation for floating screeds, haunch up in 1:4 cement: sand on both sides of conduits.
 - Insulation: Lay with tight butt joints. Continue up at perimeter abutments for full depth of screed.
 - Separating layer: Lay over insulation and turn up at perimeter abutments. Lap 100 mm at joints.
- Batching with dense aggregates
 - Mix proportions: Specified by weight.
 - Batching: Select from:
 - Batch by weight.
 - Batch by volume: Permitted on the basis of previously established weight: volume relationships of the particular materials. Use accurate gauge boxes. Allow for bulking of damp sand.
- Mixing
 - Admixtures: Do not use admixtures containing calcium chloride.
 - Water content: Minimum necessary to achieve full compaction, low enough to prevent excessive water being brought to surface during compaction.
 - Mixing: Mix materials thoroughly to uniform consistence. Mixes other than no-fines must be mixed in a suitable forced action mechanical mixer. Do not use a free fall drum type mixer.
 - Consistency: Use while sufficiently plastic for full compaction.
 - Ready-mixed retarded screed mortar: Use within working time and site temperatures recommended by manufacturer. Do not re-temper.
- Permissible deviation: ± 10 mm from datum (allowing for thickness of coverings).
- Minimum screed covering: The lowest point shall be the reference.

- Slopes: shall be consistent and regularly graded. Min. 2% towards floor drains in wet zones. Sudden irregularities: Not permitted.
- Deviation of surface: Measure from underside of a 2 mt straightedge with feet, placed anywhere on surface using a slip gauge to DS EN 13318.
- General: Compact thoroughly over entire area.
- Screeds over 50 mm thick: Lay in two layers of approximately equal thickness. Roughen surface of compacted lower layer then immediately lay upper layer.
- Bay sizes: nominal 5-6 m, maximum 10 m. The joints shall be in accordance with the floor finish material joints.
- Location of bay joints: Coordinate with those required for base slab and floor covering.
- Crack control joints
 - Joint depth: half of the screed thickness.
 - Application: joints shall be applied flat, horizontal and straight.
 - trowel cut: (only for levelling screeds) right after application
 - saw cut: (for levelling and finish screeds) right after application
- Sealant movement joints with metal edgings
 - Edging material: stainless steel angle.
 - Size: To suit depth of screed
 - Installation: Centre over joints in base. Set to exact finished level of screed.
 - Secure fixing to base: Countersunk brass screws at 600mm centres.
 - Joint width: To match that of structural movement joint.
 - Sealant: To suit type of movement required.
 - Manufacturer/Product reference: Shall be selected by the sub-contractor, to be approved by the Employer.

4.1.1.3 Finishing / Curing

- Timing: Carry out all finishing operations at optimum times in relation to setting and hardening of screed material.
- Prohibited treatments to screed surfaces:
 - Wetting to assist surface working.
 - Sprinkling cement.
- Finish: Even texture with no ridges or steps.

- General: Prevent premature drying. Immediately after laying, protect surface from wind, draughts and strong sunlight. As soon as screed has set sufficiently, closely cover with polyethylene sheeting.
- Curing period: Keep polyethylene sheeting in position for not less than the period recommended by the screed manufacturer.
- Drying after curing: Allow screeds to dry gradually. Do not subject screeds to artificial drying conditions that will cause cracking or other shrinkage related problems.

4.1.2 Tile Flooring – all floors

Reference drawing

- CHA-ARUP-ZZ-00-DR-A-1001
- CHA-ARUP-ZZ-00-DR-A-4001

4.1.2.1 General specifications

- Base: Filling screed described in **Section 4.1.1**
- Preparation: In accordance with manufacturer's specifications.
- Manufacturer and product reference: Evers Keradur/Technica Antrasite-mix R10
- Dimensions 300x300x8,5mm with 105x150x9mm hollow skirtings
- Stair goings shall have standard 1550-0373 step floor tiles for anti-slip resistance and the risers shall have matt yellow wall tiles Arkitekt wall tile 1085-0991 for visual contrast.
- Floor tiles cut to fit under half size shall not be permitted unless unavoidable

EN 14411 Bla

FEATURES	Unit of mesurement	Mean value	Fixed value		Test method
Dimensions-Lenght and width	%	Conform	+/- 0,6 MAX	+/-2,0 mm	UNI EN ISO 10545-2
Side straightness	%	Conform	+/- 0,5 MAX	+/- 1,5 mm	UNI EN ISO 10545-2
Corner squareness	%	Conform	+/- 0,5 MAX	+/-2,0 mm	UNI EN ISO 10545-2
Flatness	%	Conform	+/- 0,5 MAX	+/-2,0 mm	UNI EN ISO 10545-2
Thickness	%	Conform	+/- 5 MAX	+/- 0,5 mm	UNI EN ISO 10545-2
Water absorption	%	Conform	≤ 0,5		UNI EN ISO 10545-3
Breaking strenght	N	Conform	≥ 1300 se sp ≥7,5 mm ≥ 700 se sp <7,5 mm		UNI EN ISO 10545-4
Modulus of rapture	N/mm2	Conform	≥ 35		UNI EN ISO 10545-4
Stain resistant	-	Conform	3		UNI EN ISO 10545-4
Frost resistance	-	Resist	Request		UNI EN ISO 10545-12
Resistance to chemicals for household use	-	Conform	B MIN		UNI EN ISO 10545-13

4.2 Partition Walls

Reference drawings

- CHA-ARUP-ZZ-00-DR-A-1001
- CHA-ARUP-ZZ-00-DR-A-2001
- CHA-ARUP-ZZ-00-DR-A-3001

4.2.1 General specifications

- Aircrete multi blocks H+H Multiplade or equivalent. CE labelled and certified according to EN 771-4.
- Density min. 535 ±15kg/m³
- Thickness: 100 mm
- Fixing H+H Blokfix top, bottom and sides

4.3 Wall tiles – changing rooms, toilets and showers

- Material: Two component amine cured epoxy coating. Suitable for properly prepared carbon steel, aluminum, concrete and galvanised steel substrates.
- Surface: Matt RAL 9016
- Base: Aircrete blocks described in **Section 4.2**
- Preparation: In accordance with manufacturer's specifications.
- Manufacturer and product reference: Evers Höganäs Arkitekt 1085-0015
- Dimensions: 147x147x6mm
- Wall tiles cut to fit under half size shall not be permitted unless unavoidable

EN 14411 Bla

FEATURES	Unit of mesurement	Mean value	Fixed value	Test method
Dimensions-Lenght and width	%	Conform	+/- 0,6 MAX +/-2,0 mm	UNI EN ISO 10545-2
Side straightness	%	Conform	+/- 0,5 MAX +/- 1,5 mm	UNI EN ISO 10545-2
Corner squaranness	%	Conform	+/- 0,5 MAX +/-2,0 mm	UNI EN ISO 10545-2
Flatness	%	Conform	+/- 0,5 MAX +/-2,0 mm	UNI EN ISO 10545-2
Thickness	%	Conform	+/- 5 MAX +/- 0,5 mm	UNI EN ISO 10545-2
Water absorption	%	Conform	≤ 0,5	UNI EN ISO 10545-3
Breaking strenght	N	Conform	≥ 1300 se sp ≥7,5 mm ≥ 700 se sp <7,5 mm	UNI EN ISO 10545-4
Modulus of rupture	N/mm ²	Conform	≥ 35	UNI EN ISO 10545-4
Stain resistant	-	Conform	3	UNI EN ISO 10545-4
Frost resistance	-	Resist	Request	UNI EN ISO 10545-12
Resistance to chemicals for household use	-	Conform	B MIN	UNI EN ISO 10545-13

4.4 Painted wall - corridor

MBA N2251AI – White, according to Malerfagets Behandlingsanvisning

4.5 Suspended Ceilings – all

Reference drawings

- CHA-ARUP-ZZ-00-DR-A-2001

4.5.1 General specification

- Ceiling type: Woodcrete Troldekt lys natur – ultra fine 1mm shavings
- Dimensions 25x600x600mm / 25x600x1200mm
- The ceiling sub-structure and the build-up shall be corrosion protected metal
- Density: Min 10,6 kg/m³
- Fire: B-s1,d0 min.
- Edges: Chamfered 5mm
- Fixing: Visible screws according to ceiling manufacturer

4.5.2 Integrated services

- General: Position services accurately, support adequately. Align and level in relation to the ceiling and suspension system. Do not diminish performance of ceiling system.
- Small fittings: Support with rigid backing boards or other suitable means. Do not damage or distort the ceiling.
- Cuts shall be sharp and precise. Curved cuts sharp edge / Straight cuts 5mm chamfer.
- Support: By ceiling system.

4.5.3 Coordination with service fittings and installations:

- Ceilings shall be designed and constructed to allow the installation of all service fittings and installations, indicated on the drawings, to achieve the desired visual appearance and without deterioration in the specified performance.
- Service fittings and installations include, but are not limited to, the following:
 - Air Conditioning Diffusers
 - Light Fittings
 - Sprinkler Heads.
 - Smoke Detectors
 - Speakers

4.6 Doors

Reference drawings

- CHA-ARUP-ZZ-00-DR-A-1001
- CHA-ARUP-ZZ-00-DR-A-2001

4.6.1 General specifications

- All 4 wooden doors shall be re-used and relocated to without affecting fire ratings.
- Ironmongery shall be reused if possible
- Door flashings shall be new to fit -white

4.6.2 Frosted glass doors in private showers

- Glass type: 10mm fully toughened satinated (etched) glass
- Hinging: DORMA Tensor self-closing aluminium



Locking mechanism: None

- Door leaf dimension (HxW): 1800x680mm
- Installation: Underside leaf = finished floor level +100mm. According to manufacturer.

4.7 General Fixtures Furnishing Equipment

4.7.1 The scope of the works

Installation of Employer supplied coat hooks, litterbins, soap-dispensers, benches before hand over.

4.8 Sanitary

4.8.1 Toilets general

- Wall hung model Ifö Sign 6775

- Installation/Fixing: Space proofing for cistenes in double installation wall prior to procurement is required. In case wall installation is assessed impossible, free standing model Ifö Spira Art 6240 shall take precedence.

4.8.2 Wash basins general

- All 4 sinks in toilets and changing rooms shall be re-used and relocated.
- New sink at the bottom of the staircase shall be Ifö Spira Square
- Dimension: 515x285mm

5 Decommissioning Works

Reference drawing

- CHA-ARUP-ZZ-00-DR-S-6002

5.1 Project conditions

- If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify the Employer, proceed accordingly.
- Maintain existing utilities indicated to remain in service and protect them against damage during deconstruction operations.
- Maintain fire-protection facilities in service during deconstruction operations.

5.1.1 Pre-Deconstruction Site Visit

Review methods and procedures related to deconstruction including, but not limited to, the following:

- Inspect and discuss condition of building to be deconstructed.
- Review structural load limitations of existing structure.
- Review and finalize deconstruction schedule and verify availability of materials, personnel, equipment, and facilities needed to make progress and avoid delays.
- Review requirements of work performed by other trades that rely on substrates exposed by deconstruction operations.
- Review areas where existing construction is to remain and requires protection.
- Review method for removing materials from the site.
- Review staging area for materials on the site.

5.1.2 Deconstruction plan

Present a deconstruction plan to the Employer:

- **Material Identification:** Indicate anticipated types and quantities of materials to be salvaged, recycled, and disposed of. Indicate quantities by weight or volume, but use same units of measure throughout.
- **Procedure:** Describe deconstruction methodology, sequencing, and materials handling and removal procedures. Include the anticipated final destination of each material.

5.1.3 The existing elements to be kept

- Doors in both end of corridor

5.1.4 The existing elements to be disposed

- HWC

5.1.5 The existing elements to be re-used

- 4 doors in changing rooms and toilets
- 4 Wash basins in changing rooms and toilets
- Soap dispensers, litter bins etc.
- Benches and coat hooks

5.1.6 Examination

- Verify that utilities have been disconnected and capped.
- Survey existing conditions and correlate with requirements indicated to determine extent of deconstruction required.
- Inventory and record the condition of items to be removed and salvaged.
- Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or videos.
- Perform surveys as the Work progresses to detect hazards resulting from deconstruction activities.

5.1.7 Utility services and mechanical/electrical systems

- **Existing Services/Systems:** Maintain services/systems indicated to remain and protect them against damage during deconstruction operations.
- **Service/System Requirements:** Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems.

5.1.8 Preparation

- **Site Access and Temporary Controls:** Conduct deconstruction operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

- **Temporary Facilities:** Provide temporary barricades and other protection required to prevent injury to workers and damage to salvageable materials.
- Provide protection to ensure safe passage of workers around deconstruction area.
- Provide weather protection for all salvage materials (and items to remain) before, during and after deconstruction.
- **Temporary Shoring:** Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain
- Strengthen or add new supports when required during progress of deconstruction.

5.1.9 Deconstruction

- **General:** Deconstruct and remove existing construction in accordance with the materials identified for removal in the deconstruction plan. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - Proceed with deconstruction systematically, from higher to lower level. Complete deconstruction operations above each floor or tier before disturbing supporting members on the next lower level.
 - Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing, prying or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain
 - Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 - Maintain adequate ventilation when using cutting torches.
 - Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site in accordance with all federal, state and local regulations.
 - Remove structural framing members in such a way as to maintain their highest value.
 - Locate deconstruction equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - Dispose of demolished items and materials promptly.
 - **Salvaged Items:**

- Sort and organize salvaged materials as they are removed from the structure.
- Pack, crate or band materials to keep them contained and organized.
- Store items in a secure and weather protected area until removed from the site or transferred to Owner.
- Transport items to the Employer's long-term storage area, designated by the Employer
- Protect items from damage during transport and storage
- Existing Items to Remain: Protect construction indicated to remain against damage and soiling during deconstruction activities. When permitted by the Employer, items may be removed to a suitable, protected storage location during deconstruction and cleaned and reinstalled in their original locations after deconstruction operations are complete.

5.1.10 Disposal of demolished materials

- General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain the Employer's property, remove demolished materials from Project site and legally dispose of them.
- Do not allow demolished materials to accumulate on-site.
- Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- Burning: Do not burn demolished materials.

5.1.11 Cleaning

- Clean adjacent structures and improvements of dust, dirt, and debris caused by deconstruction operations. Return adjacent areas to condition existing before deconstruction operations began.

5.1.12 Compatibility of the existing and the new elements

- If a reused element will be used together with the new of the same product, make sure that they fit visually as much as possible. For example: Colors, Textures, Shininess, etc.

Appendix A

Painting

**Kategori**

Indvendig

Underlag

Porebeton, vægplade (multiplade)

Pladekvalitet skal være angivet. Vægplade ("multiplade"), hvor fuger, huller, revner og skår er udfyldt til plan flade, og samlinger udjævnet ved 10 cm bred spartling pr. 1 mm spring - i tørre rum: med gipspuds - i vådrum: med cementbundne materialer. Der må maks. være 2 huller med diameter op til 15 mm eller en ridse på 0,2 mm bredde og 3 cm længde pr. vægplade. Spartlingerne skal være fastsiddende og må ikke smuldre ved let slibning med karborundumsten nr. 80. Der kan forekomme et par huller op til 15 mm i diameter eller en enkelt ridse pr. elementflade. Overflade og udbedringer skal være hvidtør inden malerarbejdet kan påbegyndes og - uden at blive ødelagt - kunne slibes med karborundumsten nr. 80. Hvis der er foretaget reparationsudbedringer i porerbetonenpladen, må disse ikke være afvigende fra det øvrige underlag. Samlinger skal, inden malerentreprenør overtager underlaget, være udjævnet ved 10 cm bredspartling pr. 1 mm spring.

Det kan, på grund af underlagets beskaffenhed, være nødvendigt med tilkøb af supplerende spartlinger. Dette kan klarlægges ved udførelse prøvofelter.

Forventet udfald

Glat, Udfyldt og Beklædt flade

Planhedsafvigelser i malerarbejdet følger specifikationer til underlaget, dvs. at udfaldskravet til spartelarbejdet/malerarbejdet ikke kan blive mere plan end indfaldskravet på det emne der bearbejdes.

Funktionsklasse

III Høje funktionelle krav

Behandlinger

Let slibning før malerbehandling
Pletspartling: Sandspartelmasse
1 g. Fuldspartling: Sandspartelmasse
Slibning/Filtsning
Grundning.: Plastgrunder microdisp.
Opsætning af væv i: Plastvævkæber
Valg af væv: Filt alm.
Vævgrunder: Vævgrunder
2 g. Maling: Acrylplastmaling mat



**Vedligeholdelse**

V2067A1

Overførselskode

MBA-607SNP706

Kommentar

UN Corridor

Generelle forhold**Prøvningsmetode:**

I forbindelse med afprøvning af den eksisterende overflades bæredygtighed for efterfølgende malebehandling, henvises der til (i forbindelse med tilstandsvurdering) at udføre såvel tapeprøve som afsmitningsprøve

Kulørskifte og glanstrin:

Ved kulørskifte eller ændring af glanstrin må det forventes, at der skal tilkøbes minimum 1 ekstra malebehandling udover det beskrevne. Behov vurderes konkret i hver enkelte opgave/sag.

Behandlingsanvisninger og udbudsmateriale:

Udskrift af behandlingsanvisningerne bør for god ordens skyld altid vedlægges udbudsmaterialet. Dette skyldes, at der under opbygningen af beskrivelserne fremkommer nogle valgmuligheder, der ikke kan fortolkes udelukkende via nummeret på behandlingsanvisningerne, eksempelvis hvilken type vægbeklædning der ønskes.

Negative porehuller:

Negative porehuller kan ikke forventes lukket med almindelig malerbehandling, medmindre der tilvælges beklædning i form af tapet, filt eller lign.

Planhedsafvigelser:

Planhedsafvigelser i malerarbejdet følger specifikationer til underlaget, dvs. at udfaldskravet til spartelarbejdet/malerarbejdet ikke kan blive mere plan end indfaldskravet på det emne der bearbejdes.

